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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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PHILIPS INTELLECTUAL PROPERTY & STANDARDS		
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BRIARCLIFF MANOR, NY 10510		

EXAMINER	
RILEY, SHAWN	

ART UNIT	PAPER NUMBER
2838	

MAIL DATE	DELIVERY MODE
11/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/599,786

Applicant(s)

SMIDT ET AL.

Examiner

Shawn Riley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on oct06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date Nov07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. Applicant(s) is(are) reminded of the proper content of an abstract of the disclosure.

The abstract should not refer to purported merits **"Thereby a converter driven by this voltage can be more optimized or even be unregulated"** or speculative applications of the invention and should not compare the invention with the prior art. Correction is required.

2. Applicant(s) is(are) reminded of the proper language and format for an abstract of the disclosure.

3. The form and legal phraseology often used in patent claims, such as **"comprising"**, "means", and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2 and 6-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by DEMICHELE ET AL (U.S. Patent 6,061,259)(hereinafter '259) or EP-A-1 283 590 (SOMFY SAS)(hereinafter '590) or EP-A-0622889 (PHILIPS ELECTRONICS N.V; PHILIPS ELECTRONICS NV) (hereinafter '889). The document '259 discloses (the references in parentheses applying to this document) a voltage regulating circuit (read column 3, lines 22-25) comprising: a rectifier (4) for receiving an AC voltage (Input connections 1) and for generating a rectified AC voltage, and a capacitor (7) connected in parallel with said rectified AC voltage for providing a DC voltage over a load (23), and a unidirectional current switch (switch 6, conducting only positive, rectified current thus working as a unidirectional current switch) provided between the rectifier (4) and the capacitor (7), and a control block (adaptive threshold 8) arranged to activate the switch (6) at selected instances during negative slopes of the rectified AC voltage (see figures 2b and 2c, showing a conduction of switch 6 during part of the trailing edge of the rectified voltage) so that said DC voltage does not exceed a predetermined voltage limit (V_{th} , read column 5, lines 49-51).

It is further noted that the subject-matter of claim 1 also lacks novelty with respect to documents '590 and '889, having a disclosure content similar to that of '259.

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Dependent claims 2, 6 and 7 do not contain any features which, in combination with the features of any claim to which they refer, see documents '259 -'889 and the corresponding passages cited in the search report.

The additional feature of claim 2, the control block receiving the AC voltage or the rectified AC voltage and the voltage over the load, is known from '259, column 5, lines 4-8,

The additional feature of claim 6, the rectifier being a diode bridge rectifier, is known from '259-'889 as a common embodiment,

The additional feature of claim 7, the unidirectional switch being a thyristor, appears to be a slight modification of the teachings of the prior art (replacing a transistor by a thyristor), which comes within the general practice of a person skilled in the art, especially as the advantages thus achieved can be readily be contemplated in advance (the thyristor is adapted to higher currents).

1. A voltage regulating circuit comprising a rectifier (2) for receiving an AC voltage (V_{mains}) and for generating a rectified AC voltage (V_{rec}), and a capacitor (3) connected in parallel with said rectified

AC voltage for providing a DC voltage (VDc) over a load (5), characterized by a unidirectional current switch (4) provided between the rectifier (2) and the capacitor (3), and a control block (6) arranged to activate the switch (4) at selected instances (7) during negative slopes of the rectified AC voltage (Vrec) so that said DC voltage (vDc) does not exceed a predetermined voltage limit (Vlim).

2. A voltage regulating circuit according to claim 1, wherein said control block (6) is arranged to receive the AC voltage (Vmains) or the rectified AC voltage (Vre~), and the voltage over the load (VDc), in order to control the switch based on these voltage levels.

6. A voltage regulating circuit according to any one of the preceding claims, wherein said rectifier (2) is a diode bridge rectifier.

7. A voltage regulating circuit according to any one of the preceding claims, wherein said unidirectional current switch (4) is a thyristor.

Allowable Subject Matter

2. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C.F.R. § 1.111(b) and section 707.07(a) of the M.P.E.P.

4. The following is an examiner's statement of reasons for allowance: As to claims 3-5, no prior art uncovered anticipates or renders obvious applicant(s) claimed specific

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control block of figure 3, is neither known from, nor rendered obvious by, the available prior art. The comparison between the rectified AC input voltage and a voltage from a DC voltage feedback loop specifically comprising an integrator. Although the use of PI controllers in voltage control loops is known, this specific loop combination would not appear to be a straightforward option for the man skilled in the art.

Conclusion

N.B. Any inquiry from other than the applicant/attorney of record (**THAT INCLUDES SECRETARIAL AND ANY OTHER TYPE OF SUPPORT STAFF**) concerning this communication or earlier communications from the Examiner should be directed to the Patent Electronic Business Center (EBC) at 1.866.217.9197.

Any inquiry from a member of the press concerning this communication or earlier communications from the Examiner or the application should be directed to the Office of Public Affairs at 703.305.8341. Any inquiry from the applicant or an attorney of record concerning this communication or earlier communications from the Examiner should be directed to Examiner Riley whose telephone number is 571.272.2083. The Examiner can normally be reached Monday through Thursday from 7:30-6:00 p.m. Eastern Standard Time. The Examiner's Supervisor is Akm Ullah can be reached on 571-272-2361. Any inquiry about a case's location, retrieval of a case, or receipt of an amendment into a case or information regarding sent correspondence to a case **should be directed to 2800's Customer Service Center** at 571.272.2815. Any papers to be sent by fax **MUST BE** sent to fax number **571-273-8300**. Any inquiry of a general nature of this application should be **directed to the Group receptionist** whose telephone number is 571.272.2800. Status information of cases may be found at <http://pair-direct.uspto.gov> wherein unpublished application information is found through private PAIR and published application information is found through public PAIR. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Further help on using the PAIR system is available at 1.866.217.9197 (Electronic Business Center). If you would like assistance

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from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 08

/Shawn Riley/

Primary Examiner AU 2838